



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

November 26, 2013

WELL WORK PERMIT

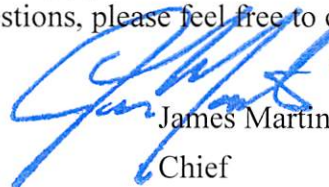
Horizontal 6A Well

This permit, API Well Number: 47-10302922, issued to STONE ENERGY CORPORATION, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.



James Martin
Chief

Operator's Well No: TRACY 1H
Farm Name: MARY J. TRACY LIVING TRUST,
API Well Number: 47-10302922
Permit Type: Horizontal 6A Well
Date Issued: 11/26/2013

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACOE). Through this permit, you are hereby being advised to consult with USACOE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
8. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: STONE ENERGY CORPORATION 494490923 103 6 554
 Operator ID County District Quadrangle
- 2) Operator's Well Number: Tracy #1H Well Pad Name: Tracy
- 3 Elevation, current ground: 1,108' Elevation, proposed post-construction: 1,101'
- 4) Well Type: (a) Gas ☒ Oil ☐ Underground Storage ☐
 Other ☐
 (b) If Gas: Shallow ☒ Deep ☐
 Horizontal ☒
- 5) Existing Pad? Yes or No: No DMH
6-26-17
- 6) Proposed Target Formation(s), Depth(s), Anticipated Thicknesses and Associated Pressure(s):
 Proposed target formation is the Marcellus Shale @ 6,840' TVD (-5,739' Sea Level), thickness is 48', and approximate rock pressure will range between 3,800 and 4,400 psig
- 7) Proposed Total Vertical Depth: 6,840' TVD at Landing Point and 6,790' TVD at TD (Up-Dip Well)
- 8) Formation at Total Vertical Depth: Marcellus Shale
- 9) Proposed Total Measured Depth: 13,300'
- 10) Approximate Fresh Water Strata Depths: 50' Shallowest and 909' Deepest
- 11) Method to Determine Fresh Water Depth: Depth of bit when water shows in the flowline or when drilling soap is injected
- 12) Approximate Saltwater Depths: 1556'
- 13) Approximate Coal Seam Depths: 904'
- 14) Approximate Depth to Possible Void (coal mine, karst, other): None Anticipated
- 15) Does proposed well location contain coal seams directly overlying or adjacent to an active mine? If so, indicate name and depth of mine: No
- 16) Describe proposed well work: MIRU conductor rig and set conductor into solid rock cementing to surface. RDMO conductor rig and MIRU top-hole rig and drill to KOP while setting surface and intermediate casing string and cementing them to surface. RDMO top-rig and MIRU horizontal rig. Drill curve and lateral on WBM, set production casing and cement in place. RDMO.
- 17) Describe fracturing/stimulating methods in detail:
MIRU completion equipment. Clean out well bore and run CBL from approximately 30 degrees in the curve to surface. Perforate 23 individual stages in the lateral section of the well bore and stimulate each individual set of perforations using slick water and sand. MIRU service rig and flow well back. Clean out well bore and run production tubing. Test well flow. See the attached frac chemical addendum for additives used during the stimulation.
- 18) Total area to be disturbed, including roads, stockpile area, pits, etc, (acres): 14.9 Received
Office of Oil & Gas
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- 19) Area to be disturbed for well pad only, less access road (acres): 11.7

103-02922

WW - 6B
(3/13)

20)

CASING AND TUBING PROGRAM

TYPE	Size	New or Used	Grade	Weight per ft.	FOOTAGE: For Drilling	INTERVALS: Left in Well	CEMENT: Fill -up (Cu. Ft.)
Conductor	20"	New	LS	94.0	40'	40'	20 - GTS
Fresh Water	13.375"	New	J55	54.5	1,095'	1,095'	1,059 - CTS
Coal	13.375"	New	J55	54.5	1,095'	1,095'	1,059 - CTS
Intermediate	9.625"	New	J55	36.0	2,430'	2,430'	617 Lead - 393 Tail CTS
Production	5.5"	New	P110	20.0		13,300'	1,025 Lead - 2,288 Tail TOC @ 1,430'
Tubing	2.375"	New	J55	4.7		6,300'	N/A
Liners							

Surface/Coal String will be set above Sea Level at 1,101'.

DRH 6-26-17

TYPE	Size	Wellbore Diameter	Wall Thickness	Burst Pressure	Cement Type	Cement Yield
Conductor	20"	24"	0.375"	N/A	Type 1	1.18
Fresh Water	13.375"	17.5"	0.380"	2,730 psi	Class A	1.19
Coal	13.375"	17.5"	0.380"	2,730 psi	Class A	1.19
Intermediate	9.625"	12.25"	0.352"	3,520 psi	Class A	1.26 Lead - 1.19 Tail
Production	5.5"	8.75"	0.361"	12,360 psi	Class A	1.25 Lead - 1.23 Tail
Tubing	2.375"	N/A	0.190"	7,700 psi	N/A	N/A
Liners	N/A					

PACKERS

Kind:	N/A			
Sizes:				
Depths Set:				

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21) Describe centralizer placement for each casing string.

spring centralizers with one (1) being placed above the guide shoe and one (1) every second joint to surface, 14 total.

-Intermediate string will incorporate bow spring centralizers with one (1) above the guide shoe, one (1) above float collar, and one (1) every third joint to surface for a total of 21 centralizers. One straight vane rigid centralizer will be placed as close to the surface as practical.

-Production string will incorporate alternating left and right hand spiral centralizers with one (1) every fourth joint to 500' above KOP and every third joint from KOP to top of slant for a total 70 left/right rigid spiral centralizers. From top of slant to TOC bow spring centralizers will be used on every third joint for a total of 10.

22) Describe all cement additives associated with each cement type.

-Fresh Water/Coal string uses a slurry of Class A cement with 0.125 pps Cello Flake and 1.0% to 3.0% CaCl₂.

-Intermediate string uses a Lead/Tail slurry. Lead is Class A cement with 0.2 gps Accelerator, 0.08 gps Dispersant, 0.1 gps Anti Foam, 4.0% Expanding Agent, and 0.5% Gas Migration Agent. Tail is Class A cement with 1.0% CaCl₂, 0.125 pps Cello Flake, and 0.2% Anti-Foam.

- Production string uses a Lead/Tail slurry. the Lead is Class A cement with 4.0% Expanding Agent, 0.5% Gas Migration Agent, 0.25 gps Dispersant, 0.1 gps Anti-foam, and 0.06 gps Retarder. The Tail is Class A cement with 0.2% Dispersant, 0.4% Fluid Loss, 0.2% Anti-Foam, 0.15% retarder, and 0.2% Anti-Settling Agent.

23) Proposed borehole conditioning procedures.

-Fresh Water/Coal section will be conditioned by circulating air down the down the drill string at TD for 30 to 90 minutes or until the well bore clears of cuttings.

- Intermediate section will conditioned by circulating air and/or stiff foam through the drill string at TD for 30 to 120 minutes until well bore clears of cuttings.

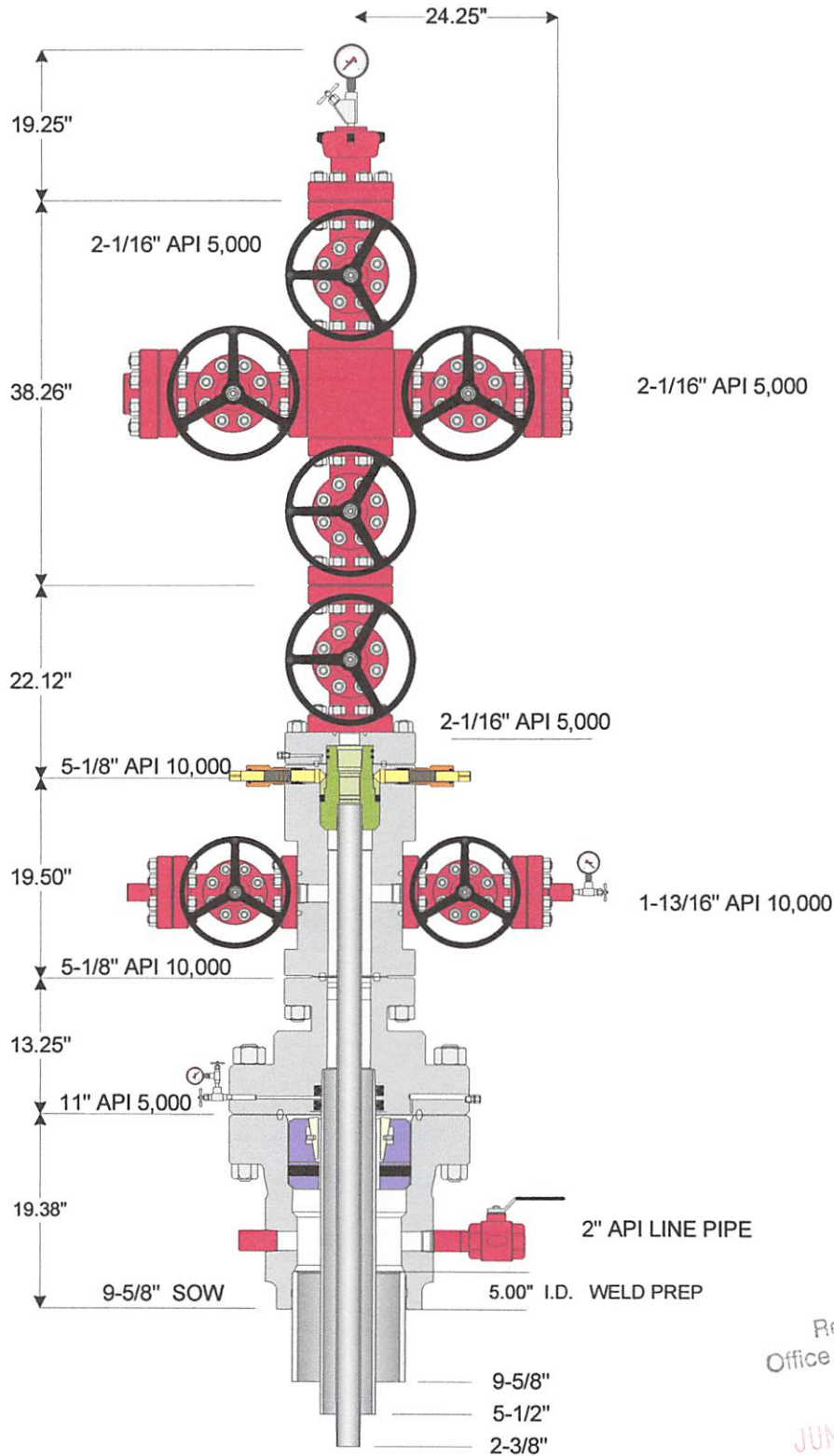
-Production section will be conditioned by circulating drilling fluid through the drill string at TD for 120 to 720 minutes until cuttings shakers clear of cuttings.

*Note: Attach additional sheets as needed.

RECEIVED
Office of Oil and Gas
NOV 14 2013
WV Department of
Environmental Protection

103-02922

NOTE: THIS DRAWING IS NOT TO SCALE. THE DIMENSIONS REFLECTED ON THE DRAWING ARE ESTIMATED MEASUREMENTS AND FOR REFERENCE ONLY.



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JUN 28 2013

DAW
6-26-13



Weatherford

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Customer: STONE ENERGY

Project: 46705

Quote: 99565 v 3

Tender, Project or Well: 2011- 2012 CONVENTIONAL MARCELLUS

Date: 07-17-2011

Drawn By: RF

Well: Tracy #1H
 State: West Virginia
 County: Wetzel
 District: Magolia
 Prospect: Mary
 Location: Surface: North = 4,385,531 East = 520,384 (UTM NAD 83)
 PBHL: North = 4,387,033 East = 519,188 (UTM NAD 83)
 PTD: 13300' MD / 6790' TVD

STONE ENERGY - PROPOSED HORIZONTAL

Revision: 25-June-13

Permit Number: 47-103-
 Permit Issued:
 Post Construction Ground Elevation: 1101
 Kelly Bushing: 18'
 Rig:
 Spud Date:
 TD Date:
 Rig Release Date:

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
JUN 28 2013

HOLE SIZE	PILOT HOLE FORMATION TOPS	WELLBORE DIAGRAM	CASING & CEMENTING DATA DIRECTIONAL DATA	MW & FLUID TYPE	HOLE DEV.
24" Hole then Driven	40' KB (22' BGL)		CONDUCTOR PIPE 20" x 3/8" wall L/S PE @ 40' (set in bedrock & grouted to surface)		Vertical
17-1/2" Hole	Shallowest FW 50' TVD Pittsburgh Coal 904' TVD Deepest FW 909' TVD 1095' TVD			Air / Mist	
12-1/4" Hole	Salt Water 1556' TVD Little Lime 2068' TVD Big Lime 2098' TVD Big Injun Sandstone 2198' TVD Base of Big Injun 2298' TVD 2430' TVD Berea Sandstone 2666' TVD Gordon Sandstone 2870' TVD		SURFACE CASING 13-3/8" 54.5# J-55 STC @ 1095' MD/TV Set through fresh water zones Set through coal zones Cemented to surface	Stiff Foam	Vertical
8-3/4" Hole			INTERMEDIATE CASING 9-5/8" 36.0# J-55 LTC @ 2430' MD/TV Set through potential salt water zones Set below base of Big Injun Cemented to surface		Vertical
				Air / Dust	
8-3/4" Hole	Rhinestreet Shale (Base) 6368' TVD		KOP @ 6119' TVD	WBM in Curve	
8-3/4" Hole	Middlesex Shale 6565' TVD West River Shale 6620' TVD Genesee Shale 6702' TVD Tully Limestone 6721' TVD Hamilton Shale 6761' TVD				
8-3/4" Hole in Lateral	Marcellus Shale 6815' TVD			WBM in Lateral	~90.5°
	Onondaga Limestone 6863' TVD				
Notes: Formation tops as per vertical pilot hole Curve & lateral tops will vary due to structural changes Directional plan based upon best estimate of structure			TD @ 13300' MD / 6790' TVD PRODUCTION CASING 5-1/2" 20.0# P-110 CDC @ 13300' MD Top of Cement @ 1430' (~1000' inside 9-5/8")		

DMH
 6-26-13

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

20 13

 OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
DANIELLE L. SNODERLY
RR2 Box 248A, Fairmont, WV 26554
My Commission Expires May 18, 2021

103-02922

Form WW-9

Operator's Well No. Tracy #1H

STONE ENERGY CORPORATION

Proposed Revegetation Treatment: Acres Disturbed 14.9 Prevegetation pH _____

Lime 2.0 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 500-750 lbs/acre (500 lbs minimum)

Mulch 0.50 to 0.75 + Straw Tons/acre

Seed Mixtures

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
Marcellus Mix	100.0	Marcellus Mix	100.0
White or Ladino Clover	10.0	White or Ladino Clover	10.0
Orchard Grass	40.0	Orchard Grass	40.0
Winter Rye	50.0	Winter Rye	50.0

Attach:

Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: _____

Title: Oil & Gas Inspector

Date: 6-26-17

Field Reviewed? ☒ Yes

☐ No

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WW-9 ADDENDUM

Drilling Medium Anticipated for This well

- Vertical section of well bore, down to KOP, will be drilled on air and/or a combination of air and drilling soap.
- From KOP through the curve section and horizontal section of well bore will be drilled on a brine-water based mud system.

Additives to be Used While Drilling

- Common additives when air drilling: KCl (CAS No. 1302-78-9 & 14808-60-7), soda ash (CAS No. 497-19-8), shale stabilizer (CAS No. 67-48-1 & 7732-1835), drilling soap (CAS No. 111-76-2), air hammer/motor lubricant.
- Common water based additives for mud drilling: NaCl (CAS No. 7647-14-5), KCl (CAS No. 7447-40-7), barite (CAS No. 13462-86-7 & 14808-60-7), starch (CAS No. 9005-25-8), PAC (CAS No. 9004-32-4), xanthum gum (CAS No. 11138-66-2), PHPA (CAS No. 64742-47-8), polysaccharide (CAS No. 11138-66-2), sulfonated asphaltic material (CAS No. 269-212-0 & 238-878-4), aluminum silicate (CAS No. 37287-16-4), gilsonite (CAS No. 12002-43-6), graphite (CAS No. 14808-60-7 & 7782-42-5), shale stabilizer (CAS No. 67-48-1 & 7732-18-5), fluid loss control polymers (CAS No. 9004-34-6), viscosity control polymers (CAS No. 11138-66-2 & 107-22-2), soda ash (CAS No. 497-19-8), sodium bicarbonate (CAS No. 144-55-8), NaOH (CAS No. 1310-73-2, 7647-14-5, & 7732-18-5), lime (CAS No. 1305-62-0), gypsum (CAS No. 778-18-9), citric acid (CAS No. 77-92-9), biocide (CAS No. 52-51-7 or 7732-18-5 + 67-56-1 + 141-43-5), CaCO₃ (CAS No. 471-34-1), cellulose fibers (CAS No. 14808-60-7), nut plug (CAS No. 9004-34-6 & 14808-60-7), cross-linking polymers (CAS No. 107-22-2 & 11138-66-2), other LCMs, surfactants (CAS No. 64-17-5), ROP enhancer/lubricant (CAS No. 8002-13-9), beads, corrosion inhibitor (CAS No. 7732-18-5), aluminum stearate (CAS No. 300-92-5), defoamer (CAS No. 246-771-9).

MSDS are available upon request.

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6-26-13

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WW-9 ADDENDUM

Drill Cuttings Disposal Method

- Closed loop drilling system will be incorporated. No waste pits will be constructed. All drill cuttings are put through a drier system and hauled to and disposed of at approved and permitted landfills.

Landfills or Offsite Names and Permit Numbers

Wetzel County Sanitary Landfill
Rt. 1, Box 156A
New Martinsville, WV 26155
SWF-1021 / WV01909185

Brooke County Sanitary Landfill
Colliers, WV 26035
SWF-1013 / WV0109029

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6-26-13

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JUN 28 2013



Water Management Plan: Primary Water Sources



WMP- 01358

API/ID Number: 047-103-02922

Operator:

Stone Energy Corporation

Tracy #1H

Important:

For each proposed primary water source (including source intakes for purchased water sources) identified in your water management plan, and summarized herein, DEP has made an evaluation concerning water availability over the specified date range. DEP's assessment is based on the following considerations:

- Statistical analysis of historical USGS stream gauge data (transferred to un-gauged locations as necessary);
- Identification of sensitive aquatic life (endangered species, mussels, etc.);
- Quantification of known existing demands on the water supply (Large Quantity Users);
- Minimum flows required by the Army Corps of Engineers; and
- Designated stream uses.

Based on these factors, DEP has provided, for each intake location (and origination point for purchased water), a reference gauge location and discharge flow reading which must be surpassed prior to withdrawals. Additionally, DEP has established a minimum passby flow at the withdrawal location which must also be surpassed prior to withdrawals. These thresholds are considered terms of the permit and are enforceable as such.

DEP is aware that some intake points will be used for multiple wells and well sites. In these cases, the thresholds set by the Water Management Plan are to be interpreted as total withdrawal limits for each location over the specified date range regardless of how many wells are supported by that intake.

For all purchased water intakes, determinations of water availability are made at the original source intake location. It is the responsibility of the Oil and Gas Operator, not the seller, to cease withdrawal of water from the seller when flows are less than the minimum gauge reading at the stream gauge referenced by the Water Management Plan in order to protect stream uses.

Note that the determinations made herein are based on the best available data, but it is impossible to predict water availability in the future. While the DEP has carefully established these minimum withdrawal thresholds, it remains the operator's responsibility to protect aquatic life at all times. Approval to withdrawal is contingent upon permission from the land owner. It is the responsibility of the operator to secure and maintain permission prior to any withdrawals.

The operator is reminded that 24-48 hours prior to withdrawing (or purchasing) water, DEP must be notified by email at DEP.water.use@wv.gov.

APPROVED AUG 23 2013

Source Summary

WMP- 01358

API Number:

047-103-02922

Operator:

Stone Energy Corporation

Tracy #1H

Stream/River

Source **Ohio River @ The Spielers Club** Wetzel Owner: **The Spielers Club**

Start Date	End Date	Total Volume (gal)	Max. daily purchase (gal)	Intake Latitude:	Intake Longitude:
7/1/2014	7/1/2015	6,700,000		39.709677	-80.826384

☒ Regulated Stream? **Ohio River Min. Flow** Ref. Gauge ID: **9999999** Ohio River Station: Willow Island Lock & Dam

Max. Pump rate (gpm): **833** Min. Gauge Reading (cfs): **6,468.00** Min. Passby (cfs)

DEP Comments: Refer to the specified station on the National Weather Service's Ohio River forecast website: <http://www.erh.noaa.gov/ohrfc//flows.shtml>

Source Detail

103-02922

WMP-01358

API/ID Number:

047-103-02922

Operator:

Stone Energy Corporation

Tracy #1H

Source ID:

20595

Source Name

Ohio River @ The Spielers Club

Source Latitude:

39.709677

The Spielers Club

Source Longitude:

-80.826384

HUC-8 Code:

5030201

Drainage Area (sq. mi.):

25000

County:

Wetzel

Anticipated withdrawal start date:

7/1/2014

Anticipated withdrawal end date:

7/1/2015

Total Volume from Source (gal):

6,700,000

☐ Endangered Species?

☒ Mussel Stream?

☐ Trout Stream?

☐ Tier 3?

☒ Regulated Stream?

Ohio River Min. Flow

Max. Pump rate (gpm):

833

☒ Proximate PSD?

Grandview-Doolin PSD

Max. Simultaneous Trucks:

0

☒ Gauged Stream?

Max. Truck pump rate (gpm)

0

Reference Gaug

9999999

Ohio River Station: Willow Island Lock & Dam

Drainage Area (sq. mi.)

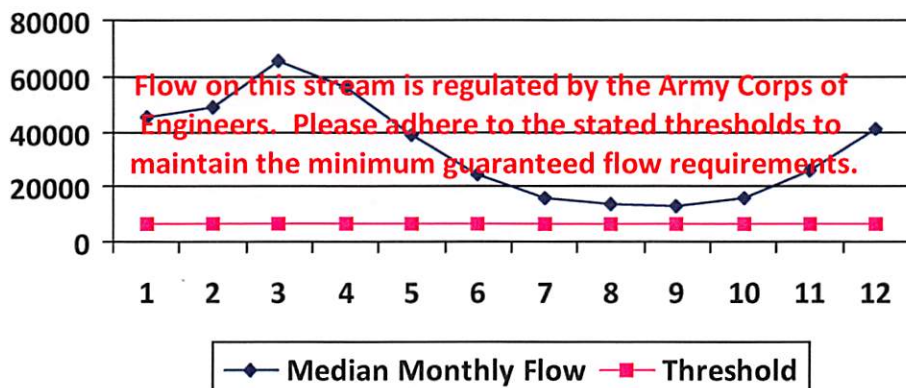
25,000.00

Gauge Threshold (cfs):

6468

Month	Median monthly flow (cfs)	Threshold (+ pump)	Estimated Available water (cfs)
1	45,700.00	-	-
2	49,200.00	-	-
3	65,700.00	-	-
4	56,100.00	-	-
5	38,700.00	-	-
6	24,300.00	-	-
7	16,000.00	-	-
8	13,400.00	-	-
9	12,800.00	-	-
10	15,500.00	-	-
11	26,300.00	-	-
12	41,300.00	-	-

Water Availability Profile



Water Availability Assessment of Location

Base Threshold (cfs):

-

Upstream Demand (cfs):

0.00

Downstream Demand (cfs):

0.00

Pump rate (cfs):

1.86

Headwater Safety (cfs):

0.00

Ungauged Stream Safety (cfs):

0.00

Min. Gauge Reading (cfs):

-

Passby at Location (cfs):

-

"Threshold", as depicted in the chart above is meant only to indicate the calculated base threshold at the proposed withdrawal location. This value does not include the proposed pump rate or existing demand on the stream. Refer to the monthly breakdown above for a more complete estimation of water availability by month.



Water Management Plan: Secondary Water Sources



WMP- 01358

API/ID Number

047-103-02922

Operator:

Stone Energy Corporation

Tracy #1H

Important:

For each proposed secondary water source identified in your water management plan (i.e., groundwater well, lake/reservoir, recycled frac water, multi-site impoundment, out-of-state source), DEP makes no estimation of the availability of water. These sources may prove to be unsuitable water supplies. Please review the following notes:

- For groundwater supply wells, DEP recommends that the operator contact the local health department prior to drilling any new well; and reminds the operator that all drinking water wells within 1,500 feet of a water supply well shall be flow- and quality-tested by the operator at the request of the drinking well owner prior to operation of the water supply well.
- For each proposed multi-site impoundment water source identified in your water management plan (if applicable), DEP will review the withdrawal limits established in the referenced Water Management Plan for current suitability and provide to the operator these limits for each identified intake. Note that withdrawal limits may be modified as necessary based on changing demands upon that water supply.

Multi-site impoundment

Source ID:	20596	Source Name	Pribble Freshwater Impoundment		Source start date:	7/1/2014
					Source end date:	7/1/2015
Source Lat:	39.685144	Source Long:	-80.820002	County	Wetzel	
Max. Daily Purchase (gal)		Total Volume from Source (gal):	6,700,000			
DEP Comments:						

The intake identified above has been defined in a previous water management plan. The thresholds established in that plan govern this water management plan unless otherwise noted.

Reference: WMP-277

WMP-01358

API/ID Number

047-103-02922

Operator:

Stone Energy Corporation

Tracy #1H

Important:

For each proposed secondary water source identified in your water management plan (i.e., groundwater well, lake/reservoir, recycled frac water, multi-site impoundment, out-of-state source), DEP makes no estimation of the availability of water. These sources may prove to be unsuitable water supplies. Please review the following notes:

- For groundwater supply wells, DEP recommends that the operator contact the local health department prior to drilling any new well; and reminds the operator that all drinking water wells within 1,500 feet of a water supply well shall be flow- and quality-tested by the operator at the request of the drinking well owner prior to operation of the water supply well.
- For each proposed multi-site impoundment water source identified in your water management plan (if applicable), DEP will review the withdrawal limits established in the referenced Water Management Plan for current suitability and provide to the operator these limits for each identified intake. Note that withdrawal limits may be modified as necessary based on changing demands upon that water supply.

Source ID:	20597	Source Name	Tuttle Fresh Water Impoundment		Source start date:	7/1/2014
					Source end date:	7/1/2015
Source Lat:	39.586528	Source Long:	-80.779889	County	Wetzel	
Max. Daily Purchase (gal)		Total Volume from Source (gal):	3,350,000			
DEP Comments:						

The intake identified above has been defined in a previous water management plan. The thresholds established in that plan govern this water management plan unless otherwise noted.

Reference: WMP-588

Source ID:	20598	Source Name	Conley Fresh Water Impoundment		Source start date:	7/1/2014
					Source end date:	7/1/2015
Source Lat:	39.608922	Source Long:	-80.79156	County	Wetzel	
Max. Daily Purchase (gal)		Total Volume from Source (gal):	3,350,000			
DEP Comments:						

The intake identified above has been defined in a previous water management plan. The thresholds established in that plan govern this water management plan unless otherwise noted.

Reference: WMP-589

WMP-01358

API/ID Number: 047-103-02922

Operator: Stone Energy Corporation

Tracy #1H

Important:

For each proposed secondary water source identified in your water management plan (i.e., groundwater well, lake/reservoir, recycled frac water, multi-site impoundment, out-of-state source), DEP makes no estimation of the availability of water. These sources may prove to be unsuitable water supplies. Please review the following notes:

- For groundwater supply wells, DEP recommends that the operator contact the local health department prior to drilling any new well; and reminds the operator that all drinking water wells within 1,500 feet of a water supply well shall be flow- and quality-tested by the operator at the request of the drinking well owner prior to operation of the water supply well.
- For each proposed multi-site impoundment water source identified in your water management plan (if applicable), DEP will review the withdrawal limits established in the referenced Water Management Plan for current suitability and provide to the operator these limits for each identified intake. Note that withdrawal limits may be modified as necessary based on changing demands upon that water supply.

Recycled Frac Water

Source ID: 20599 Source Name Maury Pad; Weekley Pad

Source start date: 7/1/2014

Source end date: 7/1/2015

Source Lat:

Source Long:

County

Max. Daily Purchase (gal)

Total Volume from Source (gal): 200,000

DEP Comments:

Stone Energy Corporation Tracy #1H

103-02922

Page 1 of 1



HUPP Surveying & Mapping

P.O. BOX 647 GRANTSVILLE, WV 26147
PH: (304) 354-7035 E-MAIL: hupp@frontiernet.net

1" = 1000'
Porters Falls 7.5'

Stone Energy Corp.
P.O. Box 52807
Lafayette, LA 70508

TRACY #1H

LONGITUDE 80°45'00"
LAT. 39°37'09.2"

TRACY #1H BOTTOM HOLE		
STATE PLANE COORDINATES	L & L DECIMAL	UTM (NAD 83)
NORTH ZONE-NAD 27	NAD 27	ZONE 17
(N) 415138	38.63276	METERS
(E) 1640404	80.77658	4387033
		518188

TRACY #1H LANDING POINT		
STATE PLANE COORDINATES	L & L DECIMAL	UTM (NAD 83)
NORTH ZONE-NAD 27	NAD 27	ZONE 17
(N) 410230	39.81943	METERS
(E) 1643662	80.76498	4385555
		520187

WADE
32.6 ACRES ±
MAP 9
PARCEL 10TRACY #1H
BOTTOM HOLEWADE
77.392 ACRES ±
MAP 9
PARCEL 13RIGGENBACH
28.43 ACRES ±
MAP 9
PARCEL 33BROWN
17.58 ACRES ±
MAP 9
PARCEL 37MOORE
27.39 ACRES ±
MAP 9
PARCEL 43.2LEMON
33.7 ACRES ±
MAP 9
PARCEL 45.1OLIVER
12.6 ACRES ±
MAP 9
PARCEL 48.1YOUNG
63.6 ACRES ±
MAP 9
PARCEL 46FENCE
POSTTRACY
78.81 ACRES ±
MAP 14
PARCEL 5TRACY
100.19 ACRES ±
MAP 14
PARCEL 5.2CHAMBERS
40.97 ACRES ±
MAP 9
PARCEL 8.1

STONE

NOTES ON SURVEY

TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD '27. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 373 AT PAGE 280 AND INFORMATION PROVIDED BY STONE ENERGY CORPORATION.

SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF WETZEL COUNTY IN MARCH, 2013 AND INFORMATION PROVIDED BY STONE ENERGY CORPORATION. WELL LAT./LONG. ESTABLISHED BY SG-GPS(OPUS).

TRACY #1H

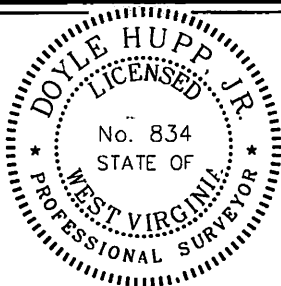
1826
Ø

TRACY #1H SURFACE HOLE		
STATE PLANE COORDINATES	L & L DECIMAL	UTM (NAD 83)
NORTH ZONE-NAD 27	NAD 27	ZONE 17
(N) 410141	39.81921	METERS
(E) 1644308	80.76269	4385531
		520384

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

P.S.
834

HUPP Surveying & Mapping
P.O. Box 647 Grantsville, WV 26147
(304) 354-7035 EMAIL: hupp@frontiernet.net



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE JUNE 24, 20 13

OPERATORS WELL NO. TRACY #1H

API

WELL

NO.

47

103

STATE

COUNTY

PERMIT

H6A
02922MINIMUM DEGREE
OF ACCURACY

1/2500

FILE NO. W:2175 (BK 59-37)

SCALE 1" = 1000'

PROVEN SOURCE
OF ELEVATION

SG-GPS (OPUS)

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS



WELL TYPE : OIL ☐ GAS ☒ LIQUID INJECTION ☐ WASTE DISPOSAL ☐ IF GAS" PRODUCTION ☒ STORAGE ☐ DEEP ☐ SHALLOW ☒

LOCATION :

ELEVATION 1,108' WATERSHED LITTLE FISHING CREEK

DISTRICT MAGNOLIA COUNTY WETZEL QUADRANGLE PORTERS FALLS 7.5'

SURFACE OWNER MARY J. TRACY LIVING TRUST, et al ACREAGE 100.19±

ROYALTY OWNER MARY J. TRACY LIVING TRUST, et al LEASE ACREAGE 348.95±

PROPOSED WORK :

LEASE NO.

DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☒ PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG ☐ OTHER ☐

PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION MARCEIUS

ESTIMATED DEPTH TVD 6,790' MD 13,300'

WELL OPERATOR STONE ENERGY CORPORATION

DESIGNATED AGENT TIM MCGREGOR

ADDRESS P.O. BOX 52807 LAFAYETTE, LA 70508

ADDRESS 6000 HAMPTON CENTER SUITE B MORGANTOWN WV 26505

COUNTY NAME

PERMIT